

## **NATIONAL CERTIFIED TESTING LABORATORIES**

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### **STRUCTURAL PERFORMANCE TEST REPORT**

Report No: NCTL-210-2327-1  
Test Date: 04-03-00  
Report Date: 04-22-00

**Client:** Florida Extruders International Incorporated  
2540 Jewett Lane  
Sanford, FL 32771-1600

**Test Specimen:** Florida Extruders International Incorporated's Model "Milestone 1000"  
Aluminum Prime Window (F-C70) (6'0" x 6'0") (Design Pressure 70.0 psf)

**Test Specifications:** AAMA/NWWDA 101/I.S. 2-97 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Sliding Glass Doors." ASTM E 283-01, Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen. ASTM E 330-90, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference. ASTM E 331-93, Test Method for Water Penetration of exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference. ASTM E 547-93, Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential.

### **TEST SPECIMEN DESCRIPTION**

**General:** The specimen tested was a fixed lite aluminum prime window measuring 6'0" wide by 6'0" high overall. Frame members were not thermally broken. The frame was of double screw (# 6 x 5/8") pan head coped construction. The frame was flush mounted to the test buck using twelve (12) total; four (4) (# 8 x 1") in head and eight (8) (# 8 x 2") pan head screws used, four (4) in each jamb.

**Glazing:** The fixed lite was interior glazed using 1/4" glass with a silicone bedding and a snap-in rigid vinyl glazing bead.

**Weatherstrip:** No weatherstrip employed.

**Weeps:** No weeps employed.

**Interior & Exterior Surface Finish:** White painted aluminum.

*Dan R. Parkins*  
2/10/02

**Weeps:** One (1) weep hole measuring 1-1/8" leg height was located at each end of each vertical sill leg.

**Interior & Exterior Surface Finish:** White painted aluminum.

**Sealant:** Frame corners were sealed with a small-joint sealant.

**Insect Screen:** No insect screen employed.

**TEST RESULTS**

<u>AAMA/NWWDA 101-97</u>	<u>Title of Test</u>	<u>Measured</u>	<u>Allowed</u>
2.1.2	Air Infiltration 0.57 psf (15 mph) 1.57 psf (25 mph)	0.01 cfm/ft <sup>2</sup> 0.03 cfm/ft <sup>2</sup>	----- 0.30 cfm/ft <sup>2</sup>
2.13	Water Resistance (5.0 gph/ft <sup>2</sup> ) WTP = 3.00 psf	No Entry	No Entry
2.1.4.2	Uniform Load Structural (Design) 70.0 psf Exterior 70.0 psf Interior	0.007" 0.017"	0.288" 0.288"

**OPTIONAL PERFORMANCE**

4.3	Water Resistance (5.0 gph/ft <sup>2</sup> ) WTP = 20.0 psf	No Entry	No Entry
4.4.2	Uniform Load Structural 105.0 psf Exterior 105.0 psf Interior	0.019" 0.026"	0.288" 0.288"

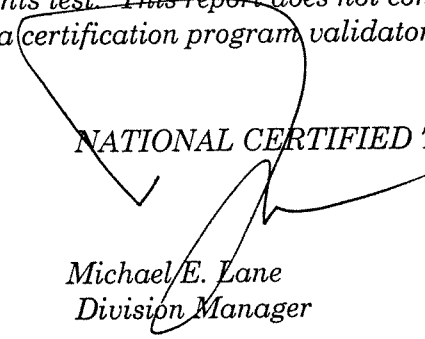
Test Completed: 04-03-00

This test specimen meets (or exceeds) the performance criteria levels specified in Table 2.1 of AAMA/NWWDA 101/I.S. 2-97 for air infiltration. The listed results were secured by using the designated test methods and indicate compliance with the performance requirements of the referenced specification paragraphs for the F-C70 6'0" x 6'0" product designation.

Barry P. Malone  
2/21/02

Detailed drawings were available for laboratory records and compared to the test specimen at the time of this report. A copy of this report along with representative sections of the test specimen will be retained by NCTL for a period of four (4) years. The results obtained apply only to the specimen tested. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen may be drawn from this test. This report does not constitute certification of the product which may only be granted by a certification program validator.

NATIONAL CERTIFIED TESTING LABORATORIES, INC.



Michael E. Lane  
Division Manager

MEL/ld

Ray D. Perkins  
2/2/02

*Forced Entry Resistance Test Results*

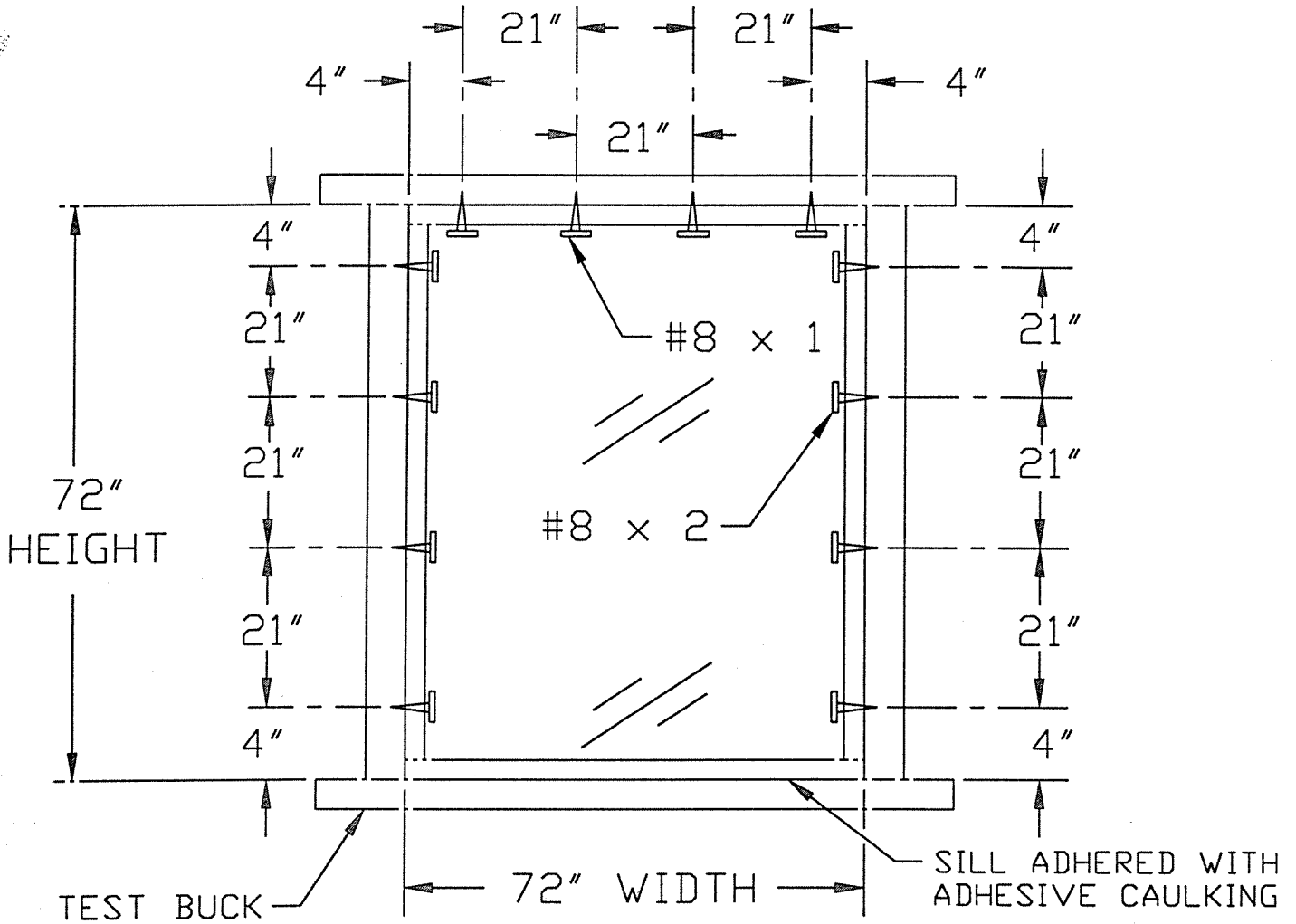
*Test Method: ASTM F588-97, "Standard Test Method for Measuring the Forced Entry Resistance of Window Assemblies, Excluding Glazing Impact".*

**TEST RESULTS**

<u>Paragraph No.</u>	<u>Loads</u>	<u>Duration</u>	<u>Measured</u>	<u>Allowed</u>
10.1-Lock Manipulation		5 Minutes	No Entry	No Entry
10.2.1.1-Test A1	L1=200 lbf	1 Minute	No Entry	No Entry
10.2.1.2-Test A2	L1=200 lbf L2=100 lbf interior	1 Minute	No Entry	No Entry
10.2.1.3-Test A3	L1=200 lbf L2=100 lbf exterior	1 Minute	No Entry	No Entry
10.2.1.4-Test A4	L1=200 lbf L2=100 lbf interior	1 Minute	No Entry	No Entry
10.2.1.5-Test A5	L1=200 lbf L2=100 lbf exterior	1 Minute	No Entry	No Entry
10.2.1.7-Test A7	L1=200 lbf L2=100 lbf interior L3= 35 lbf interior	1 Minute	No Entry	No Entry
10.2.1.8 Lock Manipulation		5 Minutes	No Entry	No Entry
10.2.4.2 Fixed Lite Glazing/ Panel Manipulation		5 Minutes	No Entry	No Entry

*George Parkins*  
2/2/02

FASTENER LOCATIONS



Dimensions shown from buck.

The test specimen was mounted to the test buck using twelve (12) screws total, (4) #8 x 1" in the head and (8) #8 x 2" in the jamba, located as shown.

⏏ - DENOTES SCREW

*Raymond Palmer*  
2/1/02

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JOB NO. : NCTL-210-2327-1

COMPANY : FLORIDA EXTRUDERS

TEST DATE : 4/03/00